This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for reproducing coniferous somatic embryos by somatic embryogenesis comprising growing an immature embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of induction medium, maintenance medium and prematuration medium, wherein the nutrient medium comprises lactose and an additional sugar, ~~and~~ wherein the induction medium is used to induce an explant to form an embryogenic tissue, the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for transfer to maturation medium and subsequent development of cotyledonary stage embryos suitable for germination, and wherein the maturation medium does not contain auxin or cytokinin.

2-4. (Cancelled)

5. (Previously presented) The method of claim 1, wherein lactose is less than 6.0 % of the nutrient medium.

6. (Previously presented) The method of claim 1, wherein the nutrient medium is gelled or liquid.

7. (Previously presented) The method of claim 1, wherein the coniferous somatic embryos are selected from the family *Pinaceae*.

8. (Previously presented) The method of claim 7, wherein the coniferous somatic embryos are selected from the genera *Pinus* and *Picea*.

9. (Previously presented) The method of claim 8, wherein the coniferous somatic embryo is *Pinus taeda* or a hybrid thereof.

10.-12. (Cancelled)

13. (Previously presented) The method of claim 1, wherein the prematuration medium contains less auxin and less cytokinin than the maintenance medium.

14. (Previously presented) The method of claim 1, wherein the prematuration medium further comprises abscisic acid.

15. (Cancelled)

16. (Previously presented) The method of claim 1, wherein the additional sugars are readily metabolized.

17. (Original) The method of claim 16, wherein the additional sugars are selected from the group consisting of sucrose, glucose, and fructose.

18. (Previously presented) The method of claim 1, wherein lactose is more than 1.0% of the nutrient medium.

19. (Previously presented) The method of claim 1, wherein the embryogenic culture contains early stage embryos.

20. (Previously presented) The method of claim 1, wherein lactose is less than 2.0% of the nutrient medium.

21. (Previously presented) The method of claim 1, wherein lactose is between 1.0% and 6.0% of the nutrient medium.

22. (Previously presented) The method of claim 1, wherein the nutrient medium further comprises an auxin and a cytokinin.

23. (Currently amended) A method for reproducing *Pinus taeda*, or a hybrid thereof somatic embryos by somatic embryogenesis which comprises growing an immature embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of induction medium, maintenance medium and prematuration medium, wherein the nutrient medium comprises lactose and an additional sugar, ~~and~~ wherein the induction medium is used to induce an explant to form an embryogenic tissue, the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic

culture for transfer to maturation medium and subsequent development of cotyledonary stage embryos suitable for germination, and wherein the maturation medium does not contain auxin or cytokinin.

24-26. (Cancelled)

27. (Previously presented) The method of claim 23, wherein lactose is less than 6.0% of the nutrient medium.

28. (Previously presented) The method of claim 23, wherein the nutrient medium is gelled or liquid.

29-32. (Cancelled)

33. (Previously presented) The method of claim 23, wherein the prematuration medium contains less auxin and less cytokinin than the maintenance medium.

34. (Previously presented) The method of claim 23, wherein the prematuration medium further comprises abscisic acid.

35. (Cancelled)

36. (Previously presented) The method of claim 23, wherein the additional sugars are readily metabolized.

37. (Original) The method of claim 36, wherein the additional sugars are selected from the group consisting of sucrose, glucose, and fructose.

38. (Previously presented) The method of claim 23, wherein lactose is more than 1.0% of the nutrient medium.

39. (Previously presented) The method of claim 23, wherein the embryogenic culture contains early stage embryos and the early stage embryos are being cultured in the selected nutrient medium.

40. (Previously presented) The method of claim 23, wherein the nutrient medium further comprises an auxin and a cytokinin.

41. (Previously presented) The method of claim 23, wherein lactose is less than 2.0% of the nutrient medium.

42. (Previously presented) The method of claim 23, wherein lactose is between 1.0% and 6.0% of the nutrient medium.

43. (Currently amended) A method for reproducing conifers by somatic embryogenesis which comprises: growing conifer cells on a nutrient medium comprising lactose, an additional sugar, an auxin, and a cytokinin to produce an immature embryogenic culture and transferring the embryogenic culture to maturation medium to obtain cotyledonary stage embryos suitable for germination and reproduction of conifers, and wherein the maturation medium does not contain auxin or cytokinin.

44-49. (Cancelled)

50. (Currently amended) A method for reproducing coniferous somatic embryos by somatic embryogenesis comprising growing an immature embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of induction medium, maintenance medium and prematuration medium, wherein the nutrient medium comprises lactose, ~~and~~ wherein the induction medium is used to induce an explant to form an embryogenic tissue, the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for transfer to maturation medium and subsequent development of cotyledonary stage embryos suitable for germination, and wherein the maturation medium does not contain auxin or cytokinin.

51. (Previously presented) The method of claim 50, wherein the somatic embryo is *Pinus taeda* or a hybrid thereof.

52. (Previously presented) The method of claim 50, wherein the lactose comprises 1% or more of the nutrient medium.

53. (Previously presented) The method of claim 50, wherein the lactose is between 1% and 6% of the nutrient medium.

54. (Previously presented) The method of claim 50, wherein the lactose is less than 6% of the nutrient medium.

55. (Currently amended) A method for reproducing somatic embryos by somatic embryogenesis comprising growing an immature embryogenic culture derived from an explant on a nutrient medium selected from the group consisting of maintenance medium and prematuration medium; wherein the nutrient medium comprises a galactose-containing sugar and an additional sugar; wherein the maintenance medium is used to grow and maintain the embryogenic culture and the prematuration medium is used to prepare the embryogenic culture for transfer to maturation medium and subsequent development of cotyledonary stage embryos suitable for germination; ~~and~~ wherein the coniferous somatic embryo is selected from the group consisting of *Pinus radiata* or hybrids thereof and *Pseudotsuga menziesii* or hybrids thereof; and wherein the maturation medium does not contain auxin or cytokinin.

56. (Previously presented) The method of claim 55, wherein the coniferous somatic embryo is *Pinus radiata* or a hybrid thereof.

57. (Previously presented) The method of claim 55, wherein the coniferous somatic embryo is *Pseudotsuga menziesii* or a hybrid thereof.

58. (Previously presented) The method of claim 55, wherein the galactose-containing sugar comprises 1% or more of the nutrient medium.

59. (Previously presented) The method of claim 55, wherein the galactose-containing sugar is between 1% and 6% of the nutrient medium.

60. (Previously presented) The method of claim 55, wherein the galactose-containing sugar is less than 6% of the nutrient medium.